

ARLECDON and FRIZINGTON  
URBAN DISTRICT.

---

THIRTEENTH  
ANNUAL REPORT

OF

**JAMES I. LACE,**

MEDICAL OFFICER OF HEALTH,

*FOR 1896.*

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FRIZINGTON:

PRINTED BY W. MOSSOP, 30 MAIN STREET



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THIRLMERE HOUSE,  
FRIZINGTON,  
VIA CARNFORTH,  
*16th February, 1897.*

MR. CHAIRMAN AND GENTLEMEN,—

I have the honour to submit to you my Thirteenth Annual Report on the Health and Mortality of the Urban Sanitary District, together with an Account of the Sanitary Work done during the year 1896. In addition to the usual tabular statements (required by the Local Government Board) of sickness and mortality within the district, various other tables are appended containing important statistical information.

In dealing with the vital statistics, the population of the district is estimated up to the middle of 1896 to be 5,750, which is the same as the population assumed in the previous two years. Arlecdon has a population of 1,650; Frizington, 4,000; this shows an increase of 100 in Arlecdon, balanced by a corresponding decrease in Frizington, with a stationary population of 100 in Whillimoor. By comparing this with the census population of 1891—which was 5,697—it will be seen that our actual population has only increased 53 since that date, although the excess of births to deaths since then has been 586. There can be no doubt but that this slight increase is accounted for by the large amount of emigration that has taken place from the district to South Africa, which has counterbalanced the natural increase of population as ascertained in 1891.

During the year 1896, 161 births—85 boys and 76 girls—have taken place, or 28 per 1,000. This number is less than the number recorded in any year since the district was constituted an Urban Sanitary Authority, and 34 less than the

number registered last year. Thus we note a very considerably diminished birth-rate, without any change numerically in our population.

The total number of deaths recorded in the district during the year 1896 amounted to 72—39 males and 33 females—20 being registered in the Township of Arlecdon, and 52 in Frizington. This number represents an actual decrease of 18 upon the year 1895. The rate of mortality for the year was equivalent to 12·52 per 1,000, living, on an assumed population of 5,750 to the middle of the year, being 3·13 lower than that in 1895.

The death-rates in the district for the quarterly periods were :—

1st Quarter	...	...	15·30	...	...	22 deaths.
2nd	„	...	13·21	...	...	19 „
3rd	„	...	9·04	...	...	13 „
4th	„	...	12·52	...	...	18 „

It will be observed that there is a marked fall in the deaths recorded for the past year, which was due principally to a decrease in deaths from zymotic disease. The death-rate, as compared with the mean mortality of the preceding ten years (15·52), shows a decrease of 3 per 1,000. The mortality among children under one year (including premature births) numbered 23; that for the previous year, 18; measured by the proportion of deaths to births registered, the infantile death-rate was equal to 142 per 1,000, as compared to 92 in 1895. The senile deaths, or deaths of persons aged 65 and upwards, numbered 8, which represents a percentage of 11·11, or 11 higher than that of last year. Five deaths were due to zymotic disease, all under five years. This is 11 less than in 1895, and gives a zymotic mortality-rate of 86, being 1·87 less than last year.

By reference to Table III. it will be seen that all the deaths from zymotic disease occurred in Frizington. Scarlatina has been unusually prevalent in the district during the

greater part of the year, in fact, this disease may be said to have been almost endemic. By far the greater number of cases were very mild, and I fear many cases escaped detection altogether.

Whooping-cough made its appearance in the district during the latter part of the year, and spread rapidly among young children who had not had the disease before and were brought within its influence. In November one fatal case was recorded. We have had a great number of cases of measles, chicken-pox, and parotitis during 1896, all mild in character. No deaths were registered as being due to these complaints. It is not necessary for me to recapitulate all that was said in my Report of last year, with respect to the water supply, sewage removal, and the method of its disposal. The water is exceptionally pure, and of excellent quality for dietetic purposes. In quantity it is abundant. The sewage is removed by the separate system, and it is disposed of on the principle of broad irrigation.

The usual systematic inspection of the district was made in company with your Inspector of Nuisance, whose Tenth Annual Report I append, which gives the details of his work. Some progress has been made in drainage and ash-pit removals. One hundred and fifty yards of new main sewers have been laid, and thirty-five privies converted into water-closets. In a Special Report to the Council, in June last, I pointed out that several water-closets had been recently built, none of which had been provided with a window or efficient ventilation, and that these omissions in the construction of water-closets were a direct contravention of the Council's Bye-Laws.

Under the Sale of Food and Drugs Act, several test raids were made by the county police, and ten samples of different articles were submitted to the County Analyst, viz., 3 samples of milk, 2 of rum, 1 of whisky, 1 of mustard, 1 of sago, 1 of pepper, and 1 of vinegar. The report was that each sample was genuine.

Through the kindness of Mr. W. H. Watson, F.C.S., F.G.S., I am enabled to add the Climatological Table, prepared from meteorological observations made at Braystones since 1864.

I have the honour to remain,

Mr. Chairman and Gentlemen,

Yours obediently,

J. I. LACE,

*Medical Officer of Health.*





Population of Whillimoor, for 1895 ...	100
„ Arlecdon „ ...	1,650
„ Frizington „ ...	4,000
5,750 population for district.	

TABLE 1.—Births.

*The total number of Births, Male and Female, Legitimate and Illegitimate, and Birth-rate per 1,000 of the population of the District, and the percentage of Illegitimate to the total Births.*

DISTRICTS.	Estimated population to the middle of 1896.	BIRTHS.					Rate per 1000 Population.	Percentage of Illegitimate.
		Legitimate		Illegitim'te		1896.		
		Male	Female	Male	Female	Total.	1896.	1896.
Arlecdon .	1650	31	25	0	1	57	34.54	1.75
Frizington .	4000	52	49	1	1	103	25.75	1.93
Whillimoor.	100	1	0	0	0	1	10.00	0
The entire District .	5750	84	74	1	2	161	28.00	1.86

TABLE II.—Deaths in the District from January 1st to December 31st, 1896.

Deaths under 1 year of age ...	23	} 37
„ of 1 „ „ and under 5 years	14	
„ „ 5 „ „ „ 15 „	8	} 35
„ „ 15 „ „ „ 25 „	3	
„ „ 25 „ „ „ 65 „	16	
„ „ 65 „ „ and upwards ...	8	} over 5 years
Total ...	72	

TABLE III.—Deaths from January 1st to  
December 31st, 1896.

Extent, Population, and Mortality.	Township of Arlecdon.	Township of Frizington	Township of Whillim'r	The Entire District.
Area in Acres ...	1569·604	2079·891	1906·845	5556·340
Population, } Census 1891 .. }	1,504	4,135	58	5,697
„ estimated to the } middle of 1896 }	1,650	4,000	100	5,750
Deaths from the nine } chief zymotic } diseases ... }	0	5	0	5
Deaths from other } causes ... }	20	47	0	67
Total deaths for the } year ... }	20	52	0	72
Death-rate from the } nine chief zymotic } diseases per 1,000 }	0	1·25	0	0·86
Death-rate from all } other causes per } 1,000 ... }	12·12	11·75	0	11·65
General death-rate } per 1,000... }	12·12	13·00	0	12·52

TABLE IV.—Deaths from the Nine Chief  
Zymotic Diseases.

Small-pox ...	...	...	...	...	0	} = 5
Scarlatina ...	...	...	...	...	4	
Diphtheria ...	...	...	...	...	0	
Membraneous Croup ...	...	...	...	...	0	
Typhus Fever ...	...	...	...	...	0	
Enteric or Typhoid Fever ...	...	...	...	...	0	
Measles ...	...	...	...	...	0	
Whooping Cough ...	...	...	...	...	1	
Diarrhœa and Dysentery ...	...	...	...	...	0	

TABLE V.—Death-rate for Arlecdon and Frizington,  
as required by the Local Government Board, 1896.

Names of Diseases.	Under 5 years.	5 years and upwards.
Small-pox ... ..	0	0
Scarlatina ... ..	4	0
Diphtheria ... ..	0	0
Membraneous Croup ... ..	0	0
Typhus ... ..	0	0
Enteric or Typhoid ... ..	0	0
Continued ... ..	0	0
Relapsing ... ..	0	0
Puerperal ... ..	0	1
Cholera ... ..	0	0
Erysipelas ... ..	0	0
Measles ... ..	0	0
Whooping Cough ... ..	1	0
Diarrhœa and Dysentery ... ..	0	0
Rheumatic Fever ... ..	0	0
Ague ... ..	0	0
Phthisis ... ..	0	6
Bronchitis, Pneumonitis, and Pleuritis ...	8	6
Heart Disease ... ..	0	4
Injuries ... ..	1	2
All other Diseases .. ..	23	16
TOTALS ... ..	37	35

TABLE VI.—Summary.

	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.
Total Births	234	208	194	172	174	192	235	204	213	206	207	195	161
Annual Birthrate per 1,000 population	46.33	41.18	38.41	34.05	34.45	34.28	39.16	36.17	39.44	39.61	36.63	33.91	28.00
Total Deaths	96	82	80	82	78	95	112	77	75	91	68	90	72
Annual Mortality per 1,000 population	19.00	16.23	15.84	16.23	15.44	16.29	18.66	13.65	13.88	17.50	12.03	15.65	12.52

# Annual Report of the Sanitary Inspector.

*To the Chairman and Members of the Arlecdon and Frizington  
Urban District Council.*

GENTLEMEN,

The following is my Tenth Annual Report, which I have the pleasure to lay before you, and which gives you a Summary of the Sanitary Work done under your authority for the year 1896. Along with the Medical Officer, the usual house to house inspection of the district has been made.

TABLE VII.—Showing Particulars of the Work done by the Board during the year 1896.

Inspections made	...	...	...	...	1,319
Nuisances reported	...	...	...	...	78
„ abated without formal notice	...	...	...	...	41
Formal notices served	...	...	...	...	65
New main sewers laid	...	...	...	yards	150
Privies converted into w.c.'s	...	...	...	...	35
New w.c.'s built	...	...	...	...	2
Ashpits removed	...	...	..	...	35
Houses connected with main sewer	...	...	...	...	0
„ „ to water mains	...	...	...	...	0

I am, Mr. Chairman and Gentlemen,

Yours obediently,

JNO. WEBB.

TABLE VIII.

Table of Deaths during the year 1896 in the Arlecdon and Frizington Urban District, classified according to Diseases, Ages, and Localities.

NAMES * OF LOCALITIES.	Mortality from all causes at subjoined ages.							Mortality from Subjoined Causes, distinguishing Deaths of Children under Five Years of Age.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
	At all ages	Under 1 year	1 and under 5	5 and under 15	15 and under 25	25 and under 65	65 and upwards	FEVERS.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
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ARLECDON .. .. .	20	6	3	2	0	5	4	Under 5 .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	

Area in acres, 5,556·340. Population (1891), 5,697. General Death-rate per 1,000 population, estimated to middle of 1896, 12·52. Infant Death-rate (under one year of age), 142·85 per 1,000 births registered.

TABLE IX.

Table of Population, Births, and of Now Cases of Infectious Sickness, coming to the knowledge of the Medical Officer of Health, during the year 1896, in the Arlecdon and Frizington Urban District, classified according to Diseases, Ages, and Localities.

NAMES OF LOCALITIES.	Population at all Ages.		Registered Births	New Cases of Sickness in each locality coming to the knowledge of the Medical Officer of Health.													No. of such Cases removed from their Homes to the several localities for treatment in Isolation Hospital.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
	Census, 1891	Estimated to middle of 1895		FEVERS.													FEVERS.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
				Small-pox	Scarlatina	Diphtheria	Membranous Group	Typhus	Enteric or Typhoid	Continued	Relapsing	Puerperal	Cholera	Erysipelas	Small-pox	Scarlatina	Diphtheria	Membranous Group	Typhus	Enteric or Typhoid	Continued	Relapsing	Puerperal	Cholera																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
ARLECDON .. ..	1504	1650	57	Under 5 .....	5 upwards ..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

Notification of Infectious Disease is compulsory in the District, and has been since 19th May, 1890.

Galemire Joint Fever Hospital, in the Whitehaven Union Rural Sanitary Authority's District, near Cleator Moor.

# RAINFALL AND EVAPORATION AT BRAYSTONES, — IN THE YEAR 1896. —

Month.	Rain.	Evaporation.
January ... ..	2·48 Inches	·38 Inches
February ... ..	2·06 „	·78 „
March ... ..	4·01 „	1·97 „
April ... ..	1·66 „	2·78 „
May ... ..	·63 „	4·84 „
June ... ..	3·12 „	3·40 „
July ... ..	5·20 „	2·22 „
August ... ..	2·80 „	3·45 „
September ... ..	5·73 „	2·18 „
October ... ..	3·82 „	1·27 „
November ... ..	1·53 „	·87 „
December ... ..	4·58 „	·35 „
TOTAL ..	37·62 Inches	24·49 Inches

The rain in the year 1896 was 7·21 inches more than in the year 1895, and 1·59 inch above the average of the previous 32 years. The evaporation was 1·09 inch less than in 1895, and 7·89 inches below the average of the previous 32 years. The annual records of evaporation since 1862 indicate that the last three years—1894-95-96—have been remarkable for abnormally damp atmosphere, irrespective of rainfall.



# Rainfall and Evaporation since 1863,

At Braystones, near Whitehaven, Cumberland.

Year.	Rain.	Evaporation.
	INCHES.	INCHES.
1864	35'02	28'93
1865	33'20	30'07
1866	40'80	30'19
1867	33'24	28'73
1868	35'65	33'85
1869	40'77	32'07
1870	31'17	30'87
1871	32'92	31'06
1872	51'91	30'09
1873	36'62	29'75
1874	37'84	30'47
1875	34'61	28'97
1876	37'81	36'81
1877	58'52	36'49
1878	30'69	32'43
1879	31'58	26'21
1880	27'21	32'03
1881	35'42	25'98
1882	41'82	30'39
1883	38'95	29'38
1884	36'59	30'86
1885	33'55	28'27
1886	36'12(11 months)	22'68(10 months)
1887	20'22	22'80
1888	29'46	23'02
1889	30'48	29'74
1890	41'23	25'76
1891	39'46	26'38
1892	37'30	26'71
1893	34'17	30'38
1894	34'53	28'01
1895	30'41	25'58
1896	37'62	24'49





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